

by mineralogists as the *hornblende*, a red soil is invariably produced which is naturally fertile and possesses great capacity for improvement. On such soil lime acts with great quickness and with wonderful effect. The other granitic aggregates will produce soils of a light color that have much less body. There is a loose red soil also produced by the decomposition of the *serpentine* rocks, which is mostly barren and ought not to be confounded with the one just mentioned as resulting from the decomposition of the *hornblende*. A soil of this kind occurs in the upper part of the county, W. of the Little Elk, near the Pennsylvania line: it is easily recognised by the stunted growth which it supports.

At the head of the Big Elk the rocks are coarse grained *granite* and *gneiss*, producing a light colored thin soil; whereas at the head of the Little Elk the rocks are principally *hornblende* supporting a red soil, upon which there is commonly a valuable growth of timber. Towards the head of Principio creek the *gneiss* and *hornblende* alternate with each other, and it may always be remarked that the heaviest growth of wood is over the latter rock; this growth consisting chiefly of white, black and chestnut oaks, poplar, hickory, walnut, beech and gum. Between the Big and Little Elk the country is stony and hilly, with large masses of quartz strewn over its surface. The soil is generally thin; but it improves between the Little Elk and the W. branch of the N. E., and a fine region of country presents itself about East Nottingham and the Brick Meeting House, where the soil which takes plaster kindly has been in many places further improved by lime.

About the Rising Sun and from it to the Octorara, the country though rugged, is thickly settled and in an improving condition. Beyond the Octorara and between it and Conowingo all along the Susquehanna there are tracts of first rate land consisting of rich bottoms on the margin of the river, and a fine clayey-loam soil on the hill sides. The country in this direction is elevated, hilly, and, a little removed from the river, is considered very healthy. It is in an improving condition also, from the use of lime, and already good crops of corn, wheat, oats, and buckwheat are usually made. There are likewise to be met with fine lots of timothy, here, as well on most of the upper portions of the county, where the heads of branches furnish excellent sites for artificial meadows, and of these advantage has very commonly been taken. Along the river there are tracts of land covered with very valuable timber, oaks, poplar and beech.

An interesting feature in the physical geography of Cecil county is furnished by the numerous streams that flow through its northern boundary, furnishing it with an amount of water power, equal, perhaps, to that of any other county in the State. The most important of these streams are the Conowingo and Octorara that empty into the Susquehanna, which, although they take their rise in Pennsylvania carry a part of their waters through Maryland, the former for about